

### RESIDENTIAL DECKS B-4

#### **Development Services**

Building Department 1635 Faraday Avenue 760-602-2719 www.carlsbadca.gov

A Building Permit is required for residential decks more than 30 " above grade. This hand out describes what plans are necessary to secure a deck permit. To assist you, there is a sample of a plot plan, span tables for joists, girders, and beams, and there is a footing schedule for foundation requirements. There are also connection details to use for typical connections. If you design the deck yourself, or if your deck is free-standing or outside the table limits in this handout, please provide a foundation plan, framing details, and other details and elevations to show the extent of the proposed work. A complete structural analysis may be required for decks outside the scope of this handout.

If you use the attached tables and plans please submit:

#### 1. Two Identical Site Plans showing:

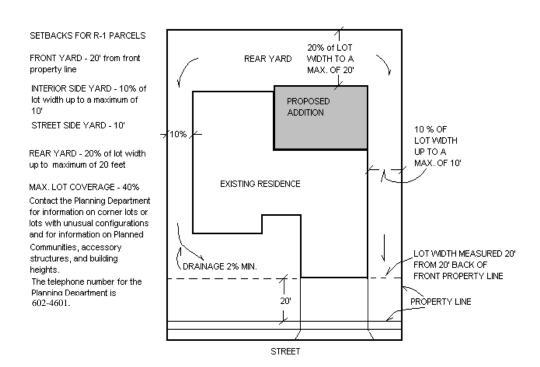
- a. Property lines with dimensions.
- b. Proposed deck and stairway (if applicable).
- c. Distances from posts to property lines.
- d. All existing structures on the property.
- e. Indicate the dimensions of the deck and the total deck square footage.
- f. Any easements on the property.

#### 2. A Building Permit Application with the following:

- a. Name of the property owner.
- b. Home Phone Number
- c. Site address, assessor's parcel number, lot number, subdivision name or number.
- d. Contractor's name, State License Number and City Business License Number; or an Owner-Builder Declaration Form (Available at the Building Department Counter).
- e. Signature of Applicant

If you are applying for a building permit in a subdivision with a homeowner's association, you should secure architectural review prior to proceeding with the project. The City does not enforce or specifically review provisions of homeowners' association CC&R's. HOA requirements may be different than City requirements.

If you are applying for a building permit in the Coastal Zone, you may need a Coastal Development Permit or an exemption. Contact the Planning Department for details. A Coastal Zone map is part of this handout. If you are applying for a building permit in a subdivision with a homeowner's association, you should secure architectural review prior to proceeding with the project. The City does not enforce or specifically review provisions of homeowners' association CC&R's. HOA requirements may be different than City requirements. If your home is part of a Planned Unit Development or a condominium, please see text of this handout.



# Minimum Square **Footing Sizes** (inches)<sup>1,2</sup>

Post Spacing	Joist Span (in feet)								
	4	6	8	10	12	14	16	18	
4	12	14	16	18	20	20	22	24	
6	14	16	20	22	24	24	28	30	
8	16	20	22	24	26	28	30	32	
10	18	22	24	28	30	32	34	36	
12	20	24	28	32	32	36	36	38	

- 1. Assumes 1,000 psf soil bearing capacity
- 2. The minimum depth for all footings is 12 inches into natural grade

## Allowable **Joist Sizes**

Joist Span Douglas Fir			Size of Joist	
6'3"	6'3"	12"	2 x 4	
5'6"	5'6"	16"		
5'0"	5'0"	24"		
9'9"	9'9"	12"	2 x 6	
8'9"	8'9"	16"		
7'9"	7'9	24"		
12'9"	12'9"	12"	2 x 8	
11'9"	11'9"	16"		
10'2'	10'2"	24"		
16'5"	16'5"	12"	2 x 10	
15'0"	15'0"	16"		
13'0"	13'0"	24"		
20'0" 18'0" 15'10"	18'0" 18'0"		2 x 12	
22'9" 19'9" 16'0"	19'9" 21'0"		2 x 14	

- 1. Assumes a live load of 40 psf and a dead load of 8 psf.
- 2. If joists are within 18" of grade, use pressure treated Douglas Fir-Larch or Foundation Grade Redwood
- 3. Assume F(b)=825 psi, F9v)=90 psi, and E=1,200,000 psi for D.F. #2
- 4. Assume F(b)=925 psi, F9v)=80 psi, and E=1,200,000 psi for Redwood

### Allowable **Beam Sizes**

- Doort	Joist Span (in feet)								
Post Spacing	4	6	8	10	12	14	16		
4	4 x 4	4 x 6	4 x 6	4 x 8	4 x 10	4 x 10	4 x 14		
6	4 x 6	4 x 8	4 x 8	4 x 10 6 x 8	4 x 10 6 x 8	4 x 14 6 x 10	4 x 14 6 x 12		
8	4 x 10 6 x 8	4 x 10 6 x 8	4 x 12 6 x 10	4 x 14 6 x 10	4 x 14 6 x 10	4 x 14 6 x 12	4 x 16 6 x 12		
10	4 x 10 6 x 10	4 x 14 6 x 12	4 x 14 6 x 12	4 x 16 6 x 14	4 x 16 6 x 14	4 x 18 6 x 14	6 x 16		
12	4 x 10 6 x 10	4 x 14 6 x 12	4 x 14 6 x 12	4 x 16 6 x14	4 x 16 6 x 14	4 x 18 6 x 14	6 x 16		

